

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 13 2013

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

Mr. John E. Skvarla, III
Secretary
North Carolina Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

Dear Mr. Skvarla:

I am writing to provide you with an update on the U.S. Environmental Protection Agency's (EPA) structural integrity assessments of the surface impoundments containing coal combustion residuals at electric utilities located in your state.

After the catastrophic release of coal ash from the Tennessee Valley Authority's Kingston, Tennessee facility in December 2008, the EPA, in collaboration with the states, undertook a nationwide comprehensive effort to assess the structural integrity of surface impoundments and similar units that contain coal combustion residuals. The purpose of the assessments was to determine whether the units are structurally stable or whether any corrective measures were needed, and, if so, to work with each facility to secure its commitment to complete any necessary corrective measures. We thank you for your assistance and support throughout this process.

All above ground units with maximum embankment heights of greater than six (6) feet at facilities in your state have been assessed by experts in dam safety, working under the direction of the EPA. Each facility has received or will shortly receive, a final report containing recommendations for corrective measures or studies needed to ensure the ongoing structural integrity of their impoundments and each facility has submitted an action plan to the EPA setting out how they plan to implement the recommendations.¹ The EPA's assessment effort was an extraordinary effort undertaken due to the critical need to ensure the structural integrity of these units. The EPA was able to bring dam safety experts in quickly and to subject these units nationwide to the same scrutiny. The assessments, analyses, reports and recommendations constitute a critical body of information which serves all of us in our ongoing efforts to protect human health and the environment. For complete information on structural integrity assessments, analyses, reports, and recommendations, please visit the EPA's website at <http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys2/>.

These assessments, however, reflect the condition of each unit at the point in time during which each assessment took place. Going forward, an ongoing routine program to assess these units and take any needed corrective measures is required to ensure the units' continued structural integrity. The continuing responsibility to ensure that these units are structurally sound lies first with each facility's owner and

¹ We invited representatives from your State to accompany EPA on the site assessments; we also provided the States an opportunity to submit comments on the draft reports and have provided the States a copy of the final report.

operator; however, you have an important role in monitoring and overseeing these units. We are therefore providing you this information to aid in your ongoing efforts.

We have enclosed a summary table for the facilities and units in your state. In addition, we will provide you with all the information from the EPA's assessment effort for each facility within your state for your use in the monitoring and oversight of these units. In those situations where we have not completed the assessment process for a particular unit, we will note that fact in the summary table. When we have completed the process, we will provide you all of the information on that unit. We would be happy to discuss any of this information with you and will provide the EPA contact when we forward you the detailed information. We also note that should the agency become aware of a situation where there is threat of release or other potential endangerment to human health or the environment, the EPA may take appropriate action. In such circumstances, the EPA will coordinate with you to ensure that measures protective of human health and the environment are taken in a timely fashion.

We again thank you for your cooperation throughout the assessment process and encourage you to continue your efforts to ensure the structural integrity of these units.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mathy Stanislaus". The signature is written in a cursive, somewhat stylized script.

Mathy Stanislaus
Assistant Administrator

Enclosure

NORTH CAROLINA

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Duke Energy	Allen Steam Station (2)	Yes	NC	East Dike	Significant	Satisfactory
				North Dike	Significant	Satisfactory

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Progress Energy	Asheville Electric Plant (2)	Yes	NC	1964 Pond	High	Poor
				1982 Pond	High	Satisfactory

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Duke Energy	Buck Steam Station (3)	Yes	NC	Basin 1 (New Dike)	Significant	Satisfactory
				Basin 2 (Main Dike)	Significant	Satisfactory
				Basin 3 (Diverter Dike)	Significant	Satisfactory

NOTE: "*" Signifies that a Company has claimed Confidential Business Information (CBI) for that particular facility and Final Reports and/or Action Plans contain CBI and have not been publicly released. All documents that **DO NOT** fall under a claim of CBI (Draft Reports, Comments, Final Reports, Recommendations Letters and Action Plans), may be found at <http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys2/>

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Progress Energy	Cape Fear Plant (5)	Yes	NC	1985 Ash Pond	Significant	Poor
				1978 Ash Pond	Significant	Poor
				1970 Ash Pond	Significant	Poor
				1963 Ash Pond	Significant	Poor
				1956 Ash Pond	Significant	Poor

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Duke Energy	Dan River (2)	Yes	NC	Primary Pond	Significant	Fair
				Secondary Pond	Significant	Fair

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Duke Energy	Marshall Steam Station (1)	Yes	NC	Coal Ash Retention Dam	Significant	Fair

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Progress Energy	Mayo Generating Plant (1)	Yes	NC	Mayo Ash Pond	Significant	Satisfactory

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Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Duke Energy	Riverbend Steam Station (2)	Yes	NC	Primary Ash Pond	Significant	Satisfactory
				Secondary Ash Pond	High	Satisfactory

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Duke Energy	Belews Creek (1)	Yes	NC	Ash Basin	High	Fair

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Progress Energy	Roxboro (3)	Yes	NC	West Ash Pond	Significant	Satisfactory
				FGD Settling Pond	Significant	Fair
				FGD Flush Pond	Significant	Fair

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Duke Energy	Cliffside Power Station (2)	Yes	NC	Upstream Embankment	Significant	Satisfactory
				Downstream Embankment	Significant	Satisfactory

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Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Progress Energy	L. V. Sutton Power Station (2)	Yes	NC	1971 Pond	Significant	Satisfactory
				1984 Pond	Significant	Satisfactory

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Progress Energy Carolinas Inc	Lee Power Station (4)	Yes	NC	Active Ash Pond, Wayne-022	Significant	Fair
				Inactive Ash Pond 1, Wayne-031	Low	Satisfactory
				Inactive Ash Pond 2, Wayne-032	Low	Fair
				Inactive Ash Pond 3, Wayne-033	Low	Satisfactory

Company	Facility (Number of Units)	Action Plan	State	Impoundment Name	Hazard Potential	Final Report Condition Rating
Progress Energy Carolinas Inc	W. H. Weatherspoon Power Station (1)	Yes	NC	Ash Pond	Low	Fair

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CONDITION RATINGS

The condition rating of an impoundment represents an assessment of the overall expected performance of the impoundment at the time of assessment considering all pertinent engineering conditions. Each impoundment at each facility was rated using the following categories:

Satisfactory

No existing or potential management unit safety deficiencies are recognized. Acceptable performance is expected under all applicable loading conditions (static, hydrologic, seismic) in accordance with the applicable criteria. Minor maintenance items may be required.

Fair

Acceptable performance is expected under all required loading conditions (static, hydrologic, seismic) in accordance with the applicable safety regulatory criteria. Minor deficiencies may exist that require remedial action and/or secondary studies or investigations.

Poor

A management unit safety deficiency is recognized for a required loading condition (static, hydrologic, seismic) in accordance with the applicable dam safety regulatory criteria. Remedial action is necessary. "Poor" also applies when further critical studies or investigations are needed to identify any potential dam safety deficiencies.

Unsatisfactory

Considered unsafe. A dam safety deficiency is recognized that requires immediate or emergency remedial action for problem resolution. Reservoir restrictions may be necessary.

HAZARD POTENTIAL RATINGS

The hazard potential ratings refer to the potential for loss of life or damage if there is a dam failure. The ratings do not refer to the structural stability of the dam. Specifically:

High Hazard Potential

Dams assigned the high hazard potential classification are those where failure or mis-operation will probably cause loss of human life.

Significant Hazard Potential

Dams assigned the significant hazard potential classification are those dams where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environment damage, disruption of lifeline facilities, or impact other concerns. Significant hazard potential classification dams are often located in predominantly rural or agricultural areas, but could be located in areas with population and significant infrastructure.

Low Hazard Potential

Dams assigned the low hazard potential classification are those where failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the owner's property.

Less Than Low Hazard Potential

Dams which do not pose high, significant, or low hazard potential.